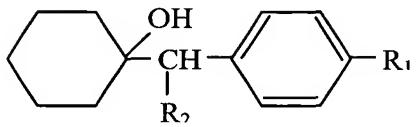
Claims

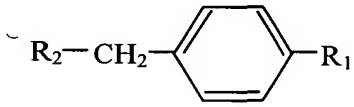
1. A process for preparing compounds of the formula



II

wherein R_1 denotes OH, or OCH_3, and R_2 denotes CN, $CONH_2$, $CONHCH_3$ or $CON(CH_3)_2$

by reacting nitriles or amides of the formula



I

wherein R_1 denotes OH, or OCH_3, and R_2 denotes CN, $CONH_2$, $CONHCH_3$ or $CON(CH_3)_2$,

with cyclohexanone in the presence of a solvent and a base selected from the group consisting of NaH, KH, LiH, MgH_2, CaH_2, AlH_3, $LiAlH_4$ and combinations thereof.

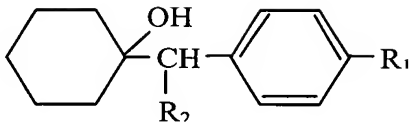
2. The process of claim 1, wherein the step of reacting nitriles or amids occurs at a temperature in a range from -10°C to 30°C.

3. The process of claim 1, wherein the reaction temperature ranges from -10°C to 10°C.

4. The process of claim 1, wherein the base is sodium hydride.

5. The process of claim 1, wherein the solvent includes an alkane, and aromatic hydrocarbon, or a mixture of alkane and aromatic hydrocarbon.

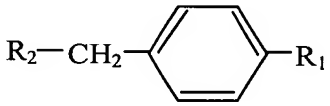
6. A process for preparing compounds of the formula



II

wherein R_1 denotes OH, or OCH_3, and R_2 denotes CN, $CONH_2$, $CONHCH_3$ or $CON(CH_3)_2$

by reacting nitriles or amides of the formula



I

wherein R_1 denotes OH, or OCH_3, and R_2 denotes CN, $CONH_2$, $CONHCH_3$ or $CON(CH_3)_2$,

with diisopropylamino lithium solution in a solvent.

7. The process of claim 6, wherein the step of reacting nitriles or amides occurs at a temperature ranging from -10°C to 50°C.

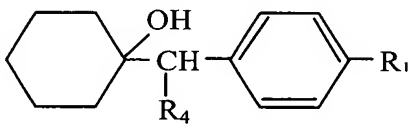
8. The process of claim 7, wherein the temperature ranges from -10°C to 10°C.

9. The process of claim 6, wherein the diisopropylamino lithium solution is obtained by reacting metalic lithium with diisopropylamine.

10. The process of claim 6, wherein the solvent is a mixture of ether and aromatic hydrocarbon.

11. The process of claim 10, wherein the ether is selected from the group consisting of diethyl ether, diisopropyl ether, ethylene glycol dimethyl ether, and tetrahydrofuran.

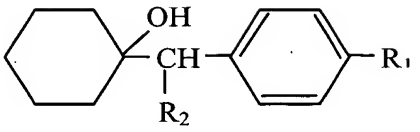
12. A process for preparing compounds of the formula



III

wherein R_1 denotes OH, or OCH_3, and R_4 denotes CH_2NH_2,

by reducing, in a solvent, a compound of the formula



II

wherein R_1 denotes OH, or OCH_3, and R_2 denotes CN,

by catalytic hydrogenation.

13. The process of claim 12, wherein the step of reducing the compound occurs under atmospheric pressure.

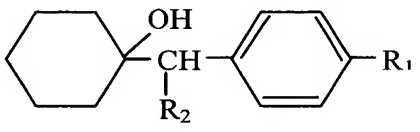
14. The process of claim 12, wherein the solvent is an alcohol or a mixture of different alcohols.

15. The process of claim 12, wherein the step of reducing the compound occurs temperature ranging from 0°C to 40°C.

16. The process of claim 12, wherein the catalytic hydrogenation is carried out under atmospheric pressure.

17. The process of claim 12, wherein the catalytic hydrogenation is facilitated using Raney Nickel.

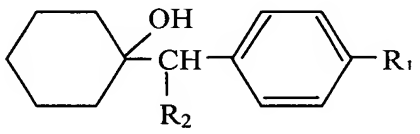
18. A process for preparing compounds of the formula



III

wherein R_1 denotes OH, or OCH_3, and R_4 denotes CH_2NH_2,

by reducing a compound of the formula



II

wherein R_1 denotes OH, or OCH_3, and R_2 denotes CN,

with a metal hydride in a solvent.

19. The process of claim 18, wherein the step of reducing the compound occurs at a temperature ranging from -10°C to 30°C.

20. The process of claim 19, wherein the temperature ranges from -10°C to 10°C.

21. The process of claim 18, further including a step of producing the metal hydride as AlH_3 obtained by reacting lithium aluminum hydride ($LiAlH_4$) with anhydrous aluminum chloride in an ether solvent.

22. The process of claim 18, wherein the solvent is an ether selected from the group consisting of diethyl ether, diisopropyl ether, and tetrahydrofuran.